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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/599,275	06/22/2000	Fraser Edwards	585-1009	7882
7590	06/03/2004		EXAMINER	
Lee Mann Smith McWilliams Sweeney & Ohlson P O Box 2786 Chicago, IL 60690-2786			TRAN, KHAI	
			ART UNIT	PAPER NUMBER
			2631	6

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/599,275	EDWARDS ET AL.
	Examiner Khai Tran	Art Unit 2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 19 March 2004.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213:

#### Disposition of Claims

4) Claim(s) 1-33,39-43 and 47-62 is/are pending in the application.  
 4a) Of the above claim(s) 34-38 and 44-46 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-62 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 2.

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Claims 34-38, 44-46 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5. Therefore, claims 34-38, 44-46 are canceled.

***Drawings***

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Objections***

3. Claim 24 is objected to because of the following informalities: Appropriate correction is required.

Regarding claim 24, line 1, the term "claim 1" should be --claim 13--.

***Claim Rejections - 35 USC § 112***

4. Claims 1-12, 13-24, 25-33, 39-43, 47-59, 60-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, line 9, the term "the database" lacks antecedent basis.

Regarding claim 13, line 9, the term “the database” lacks antecedent basis.

Regarding claim 39, line 8, the term “the database” lacks antecedent basis

Regarding claim 47, line 9, the term “the database” lacks antecedent basis.

Claims 2-12, 14-24, 40-43, 48-59 are rejected by virtue of their dependency.

Claims 25-33 recite only a means for applying a modulation scheme and forward error correction. Such claim, consequently, is considered as a single means since a means for applying a modulation scheme and forward error correction does not seem to appear in combination with another recited element of means. Consequently, such claim is held non-enabling. See MPEP 216.08(a), as set forth in claims 60-62.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 60-62 are rejected under 35 U.S.C. 102(e) as being anticipated by Cobb et al (U.S. Pat. 6,606,357).

Regarding claim 60, Cobb et al disclose a cellular phone communication for transmitting data over transmission links, wherein different modulation scheme and forward error coding level pairs are dynamically allocated to the transmission links so as to give an optimum data rate at a predetermined bit error and a predetermined symbol rate (i.e., QPSK scheme and forward error correction (FEC), see col. 6, line 33 to col. 7, line 9).

Regarding claims 61-62, Cobb et al disclose wherein the different modulation scheme and forward error correction coding level pairs are dynamically depending on the quality of the transmission links (col. 7, lines 36-52); and the transmission links are links between a plurality of end user terminals located within a cell and base station located within the cell (see Figure 3).

#### ***Allowable Subject Matter***

7. Claims 1-12, 13-24, 25-33, 39-43, 47-59 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
8. The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of the record discloses a cellular radio communication system comprising means for interrogating the data and allocating a modulation scheme and forward error correction coding level pair to the blocks of data transmitted over a transmission link dependent on the monitored quality of the transmission link.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Budka et al (U.S. Pat. 6,330,288) disclose a coding/modulation scheme selection technique.

O'Toole et al (U.S. Pat. 6,735,183) disclose a radio frequency data communication device.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHALI TRAN whose telephone number is (703) 305-1876. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on (703) 306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**KHAI TRAN**  
**Primary Examiner**  
**Art Unit 2631**

*Khai Tran* 5/27/04